

What is claimed is:

1. A motor driving system comprising a power supply  
unit, a voltage-stabilizing unit, and a driving  
5 element;

said power supply unit providing an input supply  
voltage to said voltage-stabilizing unit and said  
driving element;

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said voltage-stabilizing unit including a  
voltage-stabilizing element and producing a  
constant voltage which is provided to said driving  
element; and

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said driving element including a signal-generating  
unit, a comparing unit, and a control unit; said  
signal-generating unit being adapted to generate  
an input signal, which varies with high and low levels  
20 of the input supply voltage from said power supply  
unit; said comparing unit being adapted to compare  
the constant voltage produced by said  
voltage-stabilizing unit with the input signal  
generated by said signal-generating unit, and to  
25 generate a comparison signal; and said control unit  
being adapted to control a motor's rotating speed

according to the comparison signal generated by said  
comparing unit;

5       whereby when the input supply voltage supplied from  
said power supply unit is low and the input signal  
generated by said signal-generating unit changes,  
said comparing unit compares the constant voltage  
provided by said voltage-stabilizing unit and the  
10       changed input signal to generate said comparison  
signal, according to which a lowest motor speed is  
set for said control unit to control the rotating  
of the motor.

2. The motor driving system as claimed in claim 1,  
15       wherein said voltage-stabilizing unit is a  
voltage-stabilizing circuit.

3. The motor driving system as claimed in claim 1,  
20       wherein said voltage-stabilizing unit is a Zener  
diode.

4. The motor driving system as claimed in claim 1,  
25       wherein said voltage-stabilizing unit is a voltage  
stabilizer.

5. The motor driving system as claimed in claim 1,

wherein said signal-generating unit is a resistor-capacitor (RC) circuit.

6. The motor driving system as claimed in claim 1,  
5 wherein said signal-generating unit is an oscillator.

7. The motor driving system as claimed in claim 1,  
wherein said signal-generating unit includes a  
10 capacitor for setting a frequency level of the input signal.

8. The motor driving system as claimed in claim 1,  
further comprising a Hall element.  
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9. A motor driving system, comprising a power supply unit and a driving element;

said power supply unit providing an input supply  
20 voltage to said driving element; and

said driving element including a voltage-stabilizing unit, a signal-generating unit, a comparing unit, and a control unit; said  
25 voltage-stabilizing unit being adapted to produce a constant voltage; said signal-generating unit

being adapted to generate an input signal, which varies with high and low levels of the input supply voltage from said power supply unit; said comparing unit being adapted to compare the constant voltage produced by said voltage-stabilizing unit with the input signal generated by said signal-generating unit, and to generate a comparison signal; and said control unit being adapted to control a motor's rotating speed according to the comparison signal generated by said comparing unit;

whereby when the input supply voltage supplied from said power supply unit is low and the input signal generated by said signal-generating unit changes, said comparing unit compares the constant voltage provided by said voltage-stabilizing unit and the changed input signal to generate said comparison signal, according to which a lowest motor speed is set for said control unit to control the rotating of the motor.

10. The motor driving system as claimed in claim 9, wherein said voltage-stabilizing unit includes a voltage-stabilizing element.

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11. The motor driving system as claimed in claim 10,

wherein said voltage-stabilizing element is a Zener diode.

12.The motor driving system as claimed in claim 10,  
5 wherein said voltage-stabilizing element is a voltage stabilizer.

13.The motor driving system as claimed in claim 9,  
wherein said signal-generating unit is a  
10 resistor-capacitor (RC) circuit.

14.The motor driving system as claimed in claim 9,  
wherein said signal-generating unit is an oscillator.

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15.The motor driving system as claimed in claim 9,  
wherein said signal-generating unit includes a capacitor for setting a frequency level of the input signal.

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16.The motor driving system as claimed in claim 9,  
further comprising a Hall element.